

Title (en)  
ROTARY CUTTING TOOL

Title (de)  
ROTIERENDES SCHNEIDWERKZEUG

Title (fr)  
OUTIL DE COUPE ROTATIF

Publication  
**EP 2703139 A4 20141022 (EN)**

Application  
**EP 12777755 A 20120404**

Priority  
• JP 2011099557 A 20110427  
• JP 2012002356 W 20120404

Abstract (en)  
[origin: EP2703139A1] Provided is a rotary cutting tool that can increase the overall flexural rigidity of blades used therein, even with blades having small thicknesses. A cutter head for woodworking has fitting grooves formed at circumferential four positions on an outer peripheral side of a body. The fitting groove is curved in small measure in an arc shape in a direction opposite to a direction of rotation of the body. The fitting groove is symmetric on both sides of the body. The fitting grooves are each mounted with a blade and a wedge bar. The blade is a long and thin plate having a nearly rectangular shape and elastically deformable. The blade is made of a steel material or a cemented carbide and about 0.5 mm in thickness. The blade is curved in an arc shape that corresponds to the shape of the fitting groove in a direction opposite to a direction of rotation R and then fixated in the curved state. A twist angle representing an angle of inclination of a cutting edge in each blade from a shaft center on an outer peripheral surface of the body is a negative twist angle that changes in a curve on the side of one end surface of the body but is a positive twist angle that changes in a curve on the side of the other end surface of the body.

IPC 8 full level  
**B27G 13/02** (2006.01); **B23C 5/04** (2006.01); **B27G 13/04** (2006.01)

CPC (source: EP)  
**B27G 13/02** (2013.01); **B27G 13/04** (2013.01)

Citation (search report)  
• [XY] JP S4815493 U 19730221  
• [Y] US 2011044773 A1 20110224 - SEIDEL JUERGEN [DE], et al  
• [Y] FR 2947193 A1 20101231 - GUILLEN OUTILS TECH [FR]  
• [Y] EP 0092092 A2 19831026 - CECCHI GIANFRANCO  
• [X] JP H06304907 A 19941101 - KANEFUSA KNIFE & SAW  
• [X] FR 2235769 A1 19750131 - TECH BOIS CENTRE [FR]  
• [A] US 811768 A 19060206 - FORBES JOHN B [US]  
• [XP] CN 102328104 A 20120125 - KUNSHAN JIANFANG HIGH TECH KNIFE CO LTD  
• See references of WO 2012147281A1

Cited by  
EP3974087A1

Designated contracting state (EPC)  
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**EP 12777755 A 20120404**; JP 2011099557 A 20110427; JP 2012002356 W 20120404; TW 101113688 A 20120418